

REMARKS

Introduction

Claims 1-28 were previously and are currently pending and under consideration.

Claims 1-28 stand rejected.

Claims 1 and 10-19 are amended herein.

No new matter has been added.

Rejections Under 35 USC §101

Claims 10-18 stand rejected as being directed to non-statutory subject matter. Claims 10-18 have been amended to recite computer readable storage medium storing one or more modules to perform a computer process for executing on a computer system. For support, see at least Figure 4, and paragraphs 0008, 0041, 0042, and 0046. Furthermore, paragraph 0008 of the specification has been amended to clarify that the claims do not encompass computer data signal embodied in a carrier wave.

Withdrawal of the rejection is respectfully requested.

Rejections Under 35 USC §112, Second Paragraph

Claims 1, 10, and 19 stand rejected as being indefinite for failing to particularly point out and distinctly claim the invention. The rejection states that "[i]t is unclear how the logical network link is being replaced with the proposed logical network link, since the logical network link connects the active node and the first neighboring node and the proposed logical network link connects the first neighboring node and the second neighboring node." In an overlay network, nodes typically have multiple connections with other nodes (though not always). Therefore, there is nothing unusual about removing a link and replacing it with another link. Referring to the claims, because the link between the active node and the first node is replaced does not necessarily cause the first node to become disconnected from the overlay network. Furthermore, the

active node and the first node can still communicate, albeit not directly. For example, after the replacing they might exchange communications via the second node.

The rejection also noted that "it is unclear how a link is replaced with a reorganization probability, which is not a link." The claims have been amended to clarify that the probability is used in the operation of replacing, by comparing the probability to a random number. In the amended claims it is clear that a probability does not take the place of a link, rather the probability is used in replacing the link with another link.

Withdrawal of the rejection is respectfully requested.

Rejections Under 35 USC §102(e)

Claims 1 – 28 stand rejected under 35 USC §102(e) as being anticipated by U.S. Patent 6,909,700 to Benmohamed et al. (hereinafter "Benmohamed"). Applicant respectfully traverses the rejection as follows.

Benmohamed relates to configuring an IP network. Specifically, Benmohamed discusses techniques for "optimizing network topology; and determining router placement within a network" (Abstract). Step 208 in Figure 2 "perturb[s] network topology". An IP network consists of a set of point-to-point links between routing devices. The links can change, thus reconfiguring the network topology.

See also claim 1 of Benmohamed: "method for designing a packet-based communications network". Furthermore, the network of Benmohamed is a type of network formed by "several types of network routers... for instance a packet switch (col. 1, lines 35–40).

Claim 1 recites two distinct networks; a data network and a logical network that overlays the data network. The technique of claim 1 relates to "reorganizing [the] overlay network". The data network corresponds to a network of the type discussed in Benmohamed. The logical overlay network has no analogue in Benmohamed.

This distinction has been clarified in claim 1, which, regarding the overlay network, now recites "the overlay network comprising nodes with application-level interconnections that form the overlay network, where the nodes exchange application-level communications via the interconnections, and where the application-level communications are transmitted via a data network that the logical network overlays". In other words, the overlay network overlays the underlying data network (e.g., an IP network). The data network is equivalent to the type of network described in Benmohamed. Benmohamed has no overlay network, at the application level, overlaying its data network. Claim 1 does not recite features for reconfiguring or relinking a data routing network such as Benmohamed's IP network. For reorganizing or relinking, claim 1 recites features above the data network level.

Withdrawal of the rejection of claim 1 is respectfully requested.

If the rejection is maintained, Applicant respectfully requests Examiner to indicate what in Benmohamed corresponds to an overlay or logical network (for application-level communication), and what in Benmohamed corresponds to a data network.

Claim 10 recites that "the overlay network comprises a peer-to-peer network of nodes with respective IP addresses, where some nodes have links to other nodes, the links comprising the IP addresses of the corresponding nodes, where the nodes exchange application-level communications via the peer-to-peer network, and where the application-level communications are transmitted via an IP network". As discussed above, Benmohamed discusses only reconfiguration of a data network by reconfiguring links between IP routers. Benmohamed does not teach or suggest any peer-to-peer network where peers communicate using IP addresses at the application level.

Withdrawal of the rejection of claim 10 is respectfully requested.

Claim 19 recites a first and second node "communicating through a data network". Logical network links between nodes comprise "information that enables nodes to address network communications to other nodes". Claim 19 recites both a

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data network and a logical network (a network overlaying the data network). The nodes in Benmohamed do not communicate through a data network, rather they communicate at the link level; the nodes as a whole for the data network.

Withdrawal of the rejection of claim 19 is respectfully requested.

Conclusion

The claims are patentably distinct over the cited art. Reconsideration and reexamination of the above Application is requested. Based on the foregoing, Applicants respectfully requests that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

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If this Response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this Response, including an extension fee that is not covered by an enclosed check please charge any deficiency to Deposit Account No. 50-0463.

Respectfully submitted,
Microsoft Corporation

Date: Jan 15, 2008

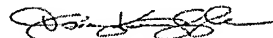
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January 15, 2008
Date



Darcy Kobylarczyk

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